# Wiring Solutions

## Wiring Solutions using the *ZIP*Link Wiring System

***ZIP***Links eliminate the normally tedious process of wiring between devices by utilizing prewired cables and DIN rail mount connector modules. It's as simple as plugging in a cable connector at either end or terminating wires at only one end. Prewired cables keep installation clean and efficient, using half the space at a fraction of the cost of standard terminal blocks. There are several wiring solutions available when using the ***ZIP***Link System ranging from PLC I/O-to-***ZIP***Link Connector Modules that are ready for field termination, options for connecting to third party devices, GS, DuraPulse and SureServo Drives, and specialty relay, transorb and communications modules. Pre-printed I/O-specific adhesive label strips for quick marking of ***ZIP***Link modules are provided with ***ZIP***Link cables. See the following solutions to help determine the best ***ZIP***Link system for your application.

***Solution 1: DirectLOGIC, CLICK and Productivity I/O Modules to ZIPLink Connector Modules***

When looking for quick and easy I/O-to-field termination, a ***ZIP***Link connector module used in conjunction with a prewired ***ZIP***Link cable, consisting of an I/O terminal block at one end and a multi-pin connector at the other end, is the best solution.

Using the PLC I/O Modules to ***ZIP***Link Connector Modules selector tables located in this section,

- 1. Locate your I/O module/PLC.
  2. Select a ***ZIP***Link Module.
  3. Select a corresponding ***ZIP***Link Cable.

***Solution 2: DirectLOGIC, CLICK and Productivity I/O Modules to 3rd Party Devices***

When wanting to connect I/O to another device within close proximity of the I/O modules, no extra terminal blocks are necessary when using the ***ZIP***Link Pigtail Cables. ***ZIP***Link Pigtail Cables are prewired to an I/O terminal block with color-coded pigtail with soldered-tip wires on the other end.

Using the **I/O Modules to 3rd Party Devices** selector tables located in this section,

- 1. Locate your PLC I/O module.
  2. Select a ***ZIP***Link Pigtail Cable that is compatible with your 3rd party device.

***Solution 3: GS Series and DURAPULSE Drives Communication Cables***

Need to communicate via Modbus RTU to a drive or a network of drives?

***ZIP***Link cables are available in a wide range of configurations for connecting to PLCs and *Sure*Servo, *Sure*Step, Stellar Soft Starter and AC drives. Add a ***ZIP***Link communications module to quickly and easily set up a multi-device network.

Using the **Drives Communication** selector tables located in this section,

- 1. Locate your Drive and type of communications.
  2. Select a ***ZIP***Link cable and other associated hardware.

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***Solution 4: Serial Communications Cables***

***ZIP***Link offers communications cables for use with ***Direct***LOGIC, CLICK, and Productivity CPUs, that can also be used with other communications devices. Connections include a 6-pin RJ12 or 9-pin, 15-pin and 25-pin D-sub connectors which can be used in conjunction with the RJ12 or D-Sub Feedthrough modules.

Using the **Serial Communications Cables** selector table located in this section,

- 1. Locate your connector type
  2. Select a cable.

***Solution 5: Specialty ZIPLink Modules***

For additional application solutions, ***ZIP***Link modules are available in a variety of configurations including stand-alone relays, 24 VDC and 120 VAC transorb modules, D-sub and RJ12 feedthrough modules, communication port adapter and distribution modules, and SureServo 50-pin I/O interface connection.

Using the ***ZIP*****Link Specialty Modules** selector table located in this section,

- 1. Locate the type of application.
  2. Select a ZIPLink module.

***Solution 6: ZIPLink Connector Modules to 3rd Party Devices***

If you need a way to connect your device to terminal blocks without all that wiring time, then our pigtail cables with color-coded soldered-tip wires are a good solution. Used in conjunction with any compatible ***ZIP***Link Connector Modules, a pigtail cable keeps wiring clean and easy and reduces troubleshooting time.

Using the **Universal Connector Modules and Pigtail Cables** table located in this section,

- 1. Select module type.
  2. Select the number of pins.
  3. Select cable.

# Motor Controller Communication

| AC Drive / Motor Controller (GS/DuraPulse) ZIPLink Selector | | | | | | | |
|---|---|---|---|---|---|---|---|
| **AC Drive / Controller** | | **Communications** | | | **ZIPLink Cable** | | |
| ***Controller*** | ***Comm Port Type*** | ***Network/Protocol*** | ***Connects to*** | ***Comm Port Type*** | ***Cable (2 meter length)*** | ***Cable Connectors*** | ***Other Hard-ware Required*** |
| ***GS1*** | RJ12 | RS-485 Modbus RTU | BRX MPUs | RS-485, 3-Pin | ZL-RJ12-CBL-2P | RJ12 to pigtail | N/A |
| | | | P1 CPUs | RS-485 | | | |
| | | | P2 CPUs | | | | |
| | | | P3 CPUs | | | | |
| | | | P2-SCM | RS-485, 4-Pin | | | |
| | | | P3-SCM | | | | |
| | | | DL06 PLCs | Port 2 (HD15) | GS-485HD15-CBL-2 | RJ12 to HD15 | |
| | | | D2-260, D2-262 CPU | | | | |
| | | | GS-EDRV100 | RJ12 | GS-EDRV-CBL-2 | RJ12 to RJ12 | |
| | | | ZL-CDM-RJ12Xxx * | RJ12 | GS-485RJ12-CBL-2 | | |
| | | | FA-ISOCON | 5-pin connector | GS-ISOCON-CBL-2 | RJ12 to 5-pin plug | |
| ***GS2*** | RJ12 | RS-232 Modbus RTU | BRX MPUs | RS-232/485, 3-Pin | ZL-RJ12-CBL-2P | RJ12 to pigtail | N/A |
| | | | P1 CPUs | RS-485 | | | |
| | | | P2 CPUs | | | | |
| | | | P3 CPUs | | | | |
| | | | P2-SCM | Ports 1, 2 & 3 | | | |
| | | | P3-SCM | Ports 1 to 4 | | | |
| | | | CLICK PLCs | Port 2 (RJ12) | GS-RJ12-CBL-2 | RJ12 to RJ12 | |
| | | | DL05 PLCs | | | | |
| | | | DL06 PLCs | Port 2 (HD15) | | | FA-15HD |
| | | | D2-250-1 CPU | | | | |
| | | | D2-260, D2-262 CPU | | | | |
| | | | D4-450, D4-454 CPU | Port 3 (25-pin) | | | FA-CABKIT |
| | | RS-485 Modbus RTU | BRX MPUs | RS-232/485, 3-Pin | ZL-RJ12-CBL-2P | RJ12 to pigtail | N/A |
| | | | P1 CPUs | RS-485 | | | |
| | | | P2 CPUs | | | | |
| | | | P3 CPUs | | | | |
| | | | P2-SCM | RS-485, 4-Pin | | | |
| | | | P3-SCM | | | | |
| | | | DL06 PLCs | Port 2 (HD15) | GS-485HD15-CBL-2 | RJ12 to HD15 | |
| | | | D2-260, D2-262 CPU | | | | |
| | | | GS-EDRV100 | RJ12 | GS-EDRV-CBL-2 | RJ12 to RJ12 | |
| | | | ZL-CDM-RJ12Xxx * | RJ12 | GS-485RJ12-CBL-2 | | |
| | | | FA-ISOCON | 5-pin connector | GS-ISOCON-CBL-2 | RJ12 to 5-pin plug | |
| ***DuraPulse (GS3)*** | RJ12 | RS-485 Modbus RTU | BRX MPUs | RS-485, 3-Pin | ZL-RJ12-CBL-2P | RJ12 to pigtail | N/A |
| | | | P1 CPUs | RS-485 | | | |
| | | | P2 CPUs | | | | |
| | | | P3 CPUs | | | | |
| | | | P2-SCM | RS-485, 4-Pin | | | |
| | | | P3-SCM | | | | |
| | | | DL06 PLCs | Port 2 (HD15) | GS-485HD15-CBL-2 | RJ12 to HD15 | |
| | | | D2-260, D2-262 CPU | | | | |
| | | | GS-EDRV100 | RJ12 | GS-EDRV-CBL-2 | RJ12 to RJ12 | |
| | | | ZL-CDM-RJ12Xxx * | RJ12 | GS-485RJ12-CBL-2 | | |
| | | | FA-ISOCON | 5-pin Connector | GS-ISOCON-CBL-2 | RJ12 to 5-pin plug | |

** When using the ZL-CDM-RJ12Xxx ZIPLink Communication Distribution Module, replace the lowercase xx with the number of RJ12 ports, i.e. 4 for four ports or 10 for ten ports. (ex: ZL-CDM-RJ12X4 or ZL-CDM-RJ12X10)*